

No.

200700159



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

*Seminis Vegetable Seeds, Inc.*

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, FIELD

'Red Rover'

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this sixteenth day of May, in the year two thousand and eight.*

*Attest:*

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

Secretary of Agriculture

**U.S. DEPARTMENT OF AGRICULTURE**  
**AGRICULTURAL MARKETING SERVICE**  
**SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE**

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**  
*(Instructions and information collection burden statement on reverse)*

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

<b>1. NAME OF OWNER</b> Seminis Vegetable Seeds, Inc.		<b>2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME</b> EX 08520700		<b>3. VARIETY NAME</b> 'RED ROVER' <i>WHL 4/22/08</i>																			
<b>4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)</b> 2700 Camino del Sol Oxnard, CA 93030-7967		<b>5. TELEPHONE (include area code)</b> (805) 647-1572		<b>FOR OFFICIAL USE ONLY</b> <b>PVPO NUMBER</b> <div style="font-size: 2em; font-weight: bold; text-align: center;">#200700159</div> <b>FILING DATE</b> FEBRUARY 26, 2007																			
		<b>6. FAX (include area code)</b> (805) 918-2545																					
<b>7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)</b> Corporation		<b>8. IF INCORPORATED, GIVE STATE OF INCORPORATION</b> California		<b>9. DATE OF INCORPORATION</b> 4 June 1962																			
<b>10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers)</b>																							
Carol Miller Seminis Vegetable Seeds, Inc. 37437 State Hwy 16 Woodland, CA 95695		Marcel Bruins Seminis Vegetable Seeds, Inc. P.O. Box 97, NL-6700 AB Wageningen, Netherlands		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%; text-align: center; vertical-align: middle;"><b>F</b></td> <td style="width:90%;"><b>FILING AND EXAMINATION FEES:</b></td> </tr> <tr> <td style="text-align: center; vertical-align: middle;"><b>E</b></td> <td>\$ 4,382.00</td> </tr> <tr> <td style="text-align: center; vertical-align: middle;"><b>E</b></td> <td><b>DATE</b> 2/26/07</td> </tr> <tr> <td style="text-align: center; vertical-align: middle;"><b>R</b></td> <td><b>CERTIFICATION FEE:</b></td> </tr> <tr> <td style="text-align: center; vertical-align: middle;"><b>E</b></td> <td>\$ 768.00</td> </tr> <tr> <td style="text-align: center; vertical-align: middle;"><b>I</b></td> <td><b>DATE</b> 4/22/08</td> </tr> <tr> <td style="text-align: center; vertical-align: middle;"><b>V</b></td> <td></td> </tr> <tr> <td style="text-align: center; vertical-align: middle;"><b>E</b></td> <td></td> </tr> <tr> <td style="text-align: center; vertical-align: middle;"><b>D</b></td> <td></td> </tr> </table>		<b>F</b>	<b>FILING AND EXAMINATION FEES:</b>	<b>E</b>	\$ 4,382.00	<b>E</b>	<b>DATE</b> 2/26/07	<b>R</b>	<b>CERTIFICATION FEE:</b>	<b>E</b>	\$ 768.00	<b>I</b>	<b>DATE</b> 4/22/08	<b>V</b>		<b>E</b>		<b>D</b>	
<b>F</b>	<b>FILING AND EXAMINATION FEES:</b>																						
<b>E</b>	\$ 4,382.00																						
<b>E</b>	<b>DATE</b> 2/26/07																						
<b>R</b>	<b>CERTIFICATION FEE:</b>																						
<b>E</b>	\$ 768.00																						
<b>I</b>	<b>DATE</b> 4/22/08																						
<b>V</b>																							
<b>E</b>																							
<b>D</b>																							
<b>11. TELEPHONE (include area code)</b> (530) 669-6274		<b>12. FAX (include area code)</b> (530) 669-6112		<b>13. E-MAIL</b> carol.l.miller@seminis.com																			
<b>14. CROP KIND (Common Name)</b> Field Bean		<b>16. FAMILY NAME (Botanical)</b> Leguminosae		<b>18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL)</b> <input type="checkbox"/> YES <input type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.																			
<b>15. GENUS AND SPECIES NAME OF CROP</b> Phaseolus vulgaris L.		<b>17. IS THE VARIETY A FIRST GENERATION HYBRID?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<b>20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)</b> <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23)																			
<b>19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)</b>																							
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Exhibit F. Declaration Regarding Deposit g. <input type="checkbox"/> Voucher Sample (3,000 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$4,382), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)																							
<b>23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)																							
<b>24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)																							
<b>25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.</b> The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.																							
<b>SIGNATURE OF OWNER</b> 			<b>SIGNATURE OF OWNER</b> 																				
<b>NAME (Please print or type)</b> Carol L. Miller			<b>NAME (Please print or type)</b> Carol L. Miller																				
<b>CAPACITY OR TITLE</b> PVP Specialist		<b>DATE</b> 22-Feb-07		<b>CAPACITY OR TITLE</b> 																			
				<b>DATE</b> 																			

(See reverse for instructions and information collection burden statement)

**GENERAL INSTRUCTIONS:** To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for \$4,382 (\$518 filing fee and \$3,864 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice). **NEW:** With the application for a seed reproduced variety or by direct deposit soon after filing, the applicant must provide at least 3,000 viable untreated seeds of the variety *per se*, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to reproduce the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of \$768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

**NOTES:** It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

**Plant Variety Protection Office**  
Telephone: (301) 504-5518 FAX: (301) 504-5291  
General E-mail: PVPOmail@usda.gov  
Homepage: <http://www.ams.usda.gov/science/pvpo/PVPindex.htm>

#200700159

**SPECIFIC INSTRUCTIONS:**

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and **provide evidence** that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, **Seed Regulatory and Testing Branch**, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870.  
<http://www.ams.usda.gov/lsg/seed.htm>.

**ITEM**

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;  
(2) the details of subsequent stages of selection and multiplication;  
(3) evidence of uniformity and stability; and  
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:  
(1) identify these varieties and state all differences objectively;  
(2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and  
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

**22. CONTINUED FROM FRONT** (Please provide a statement as to the limitation and sequence of generations that may be certified.)

**23. CONTINUED FROM FRONT** (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

**24. CONTINUED FROM FRONT** (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

**U.S. Patent Application No. 11/677,423 Entitled "Dry Bean Line 08520700" by David M. Webster was filed on 21-Feb-07.**

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

## EXHIBIT A

Origin and Breeding History of Dark Red Kidney Bean, EX 08520700 <sup>'RED ROUGH' CALI 4/22/08</sup>

EX 08520700 is a Dark Red Kidney variety with resistance to *Aphanomyces* root rot that was developed at Seminis's Western Breeding Station (WBS), Filer, Idaho, by pedigree selection from a cross of Drake, a Seminis Dark Red Kidney variety, with ZAA3MntAAK, a DRK breeding line developed at Seminis by selection for resistance to *Aphanomyces euteiches* from a backcross 1 to ZAA3 x Montcalm. ZAA3 x Montcalm was developed by pedigree selection from a cross of ZAA3, a dark red kidney breeding line received from the Centro Internacional de Agricultura Tropical (CIAT) in 1987, with Montcalm, a commercial dark red kidney variety developed at Michigan State University. The donor parent for *Aphanomyces* resistance was PI209488 from the USDA plant introduction collection for *Phaseolus vulgaris*, received in 1996. The breeding history from the crossing that led directly to EX 08520700 is as follows:

- 9-29-98 Planted Drake and ZAA3MntAAK in the greenhouse at WBS. Crosses made
- 1-12-99 Planted the F1 from above in the greenhouse at WBS. Allowed to self pollinate.
- 6-99 Planted F2 seeds in a field, designated "Wallendahl" near Grand Marsh WI, that is severely infested with *Aphanomyces euteiches*. Selected individual plants and harvested the seed by plant.
- 10-99 Planted F3 seeds of selections from Wallendahl's in the gh at WBS, inoculated with *Aphanomyces*, transplanted 2 of 3 resistant plants from selection AK50.01.02 and allowed them to self pollinate.
- 1-26-00 Planted F4 seeds in the gh at WBS. Allowed to self pollinate.
- 6-02-00 Planted F5 in the field at WBS. Selected an individual plant based on erect plant type and uniform, heavy pod set.
- 11-00 Planted F6 in the field at the Seminis breeding station at Melipilla Chile. Harvested as a bulk.
- 6-1-01 Planted F6+1 in the field at WBS as RWG1107. Observations during the growing season indicated the line was uniform and stable. All subsequent increases of EX 08520700 trace to the bulk of RWG1107. Seminis trials at the Wallendahl infested site confirmed the root rot resistance of this line, the erect plant, a good pod set, and midseason maturity.
- 6-3-02 Space planted a part of seed-lot RWG1107 in the field at WBS as RWR2489. Harvested as 200 individual plant selections.
- 5-23-03 Planted 200 individual plant selections in the field at WBS as a progeny increase under the number RWV3424. Observations during the growing season confirmed EX 08520700 is uniform and stable.

Selection criteria since 1999 represent a balance of characteristics related to maturity, productivity and quality and to goodness to fit for market needs such as erect determinate plant, yield potential in *Aphanomyces* infested soil as well as soil that is relatively free of this pathogen, dark red uniform color and freedom from split seeds when canned, and midseason maturity.

Observations during the two (2) years of 2001 and 2003 confirm EX 08520700 is uniform and stable within commercially acceptable limits. As is true with other dry bean varieties a small percentage of off-types can occur within commercially acceptable limits for almost any characteristic during the course of repeated multiplication. No variants are known to occur.

## EXHIBIT B

Novelty Statement Concerning Dark Red Kidney Bean, <sup>'RED ROUGE'</sup> EX 08520700 <sup>law</sup> 4/22/08

EX 08520700 is a determinate bush dark red kidney bean variety developed at the Seminis breeding station in Filer ID. To our knowledge the variety that most closely resembles EX 08520700 is the Seminis dark red variety Cabernet. The comparative characteristic that best distinguishes the two includes, but may not be limited to, resistance to the common root rot pathogen, *Aphanomyces euteiches*. EX 08520700 carries an allele for resistance to the bean strains of *A. euteiches* and is not damaged by this organism in greenhouse inoculations. Cabernet does not carry this allele and in greenhouse inoculations with *A. euteiches* develops severely rotted hypocotyls.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY  
Field Bean (*Phaseolus vulgaris* L.)

NAME OF APPLICANT (S) Seminis Vegetable Seeds	TEMPORARY OR EXPERIMENTAL DESIGNATION EX 08520700	VARIETY NAME 'RED ROVER' call 4/22/08
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country) 2700 Camino del Sol Oxnard, CA 93030		PVPO NUMBER #200700159

## PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Provide data for all characters unless indicated as "optional". Place numbers in the boxes for the characters or numerical values that best describe this variety. Measured data should be the mean of an appropriate number of well spaced (15-20 cm) plants. The Royal Horticultural Society or any recognized color standard may be used to determine plant color. Designate the color system used below.

## COLOR SYSTEM USED:

## LOCATION OF THE TEST(S) TO EVALUATE THIS VARIETY:

## 1. MARKET CLASS:

09

## CLASS

- 1 = Navy (Pea)
- 2 = Small White
- 3 = Black
- 4 = Pinto
- 5 = Great Northern
- 6 = Small Red
- 7 = Pink
- 8 = Cranberry
- 9 = Dark Red Kidney
- 10 = Light Red Kidney
- 11 = Yellow Eye
- 12 = Other (Specify)

## CHECK

- Seafarer
- Aurora
- Midnight
- UI-114
- UI-59
- NW-59
- Viva
- UI-50
- Montclair
- Redcloud
- Steuben

## 2 = MATURITY:

2

1 = Early (80-90 days) 2 = Medium (90-100 Days) 3 = Late (&gt; 100 Days)

092

Days from Planting to Harvest Maturity

Heat Units from Planting to Harvest Maturity (Optional). Specify Base Temperature Used: \_\_\_\_\_

094

Days from Planting to Harvest Maturity of Check Variety (Use Check Appropriate to Market Class Shown in Item 1)

## 3. PLANT HABIT:

## TYPE

- 1 = Ia Bush-determinate, Strong and Erect Stem and Branches
- 2 = Ib Bush-determinate, Weak Stem and Branches
- 3 = IIa Erect Growth Habit-indeterminate, Guides (Runners) short or not developed
- 4 = IIb Erect Growth Habit-indeterminate, Guides Medium to Long, with no Ability to Climb
- 5 = IIIa Vine-indeterminate, Short Guides with no ability to Climb
- 6 = IIIb Vine-indeterminate, Long Guides with Ability to Climb
- 7 = IVa Indeterminate Climbing, Pods Distributed Throughout the Plant
- 8 = IVb Indeterminate Climbing, Pods Concentrated on the Upper Part of the Plant

039

Average Height of Mature Plant, in cm.

038

Average Height of Check Variety, in cm.  
(Use Same Check as Above)

3

Pod Position: 1 = Low (Lower Pods Touching Soil Surface)  
2 = High (Lower Pods not Touching Soil Surface)  
3 = Scattered (Not Concentrated High or Low)

1

Adaptability to Machine Harvest: 1 = Adapted 2 = Not Adapted

1

Lodging Resistance: 1 = Good 2 = Fair 3 = Poor

5

**4. LEAFLET MORPHOLOGY:** (Use terminal Leaflet of a Fully Expanded Trifoliate)

☐ 1 = Smooth    2 = Wrinkled

☐ 1 = Dull

2 = Glossy

3 = Semiglossy

4 = Variable

Shape:

1 = Ovate

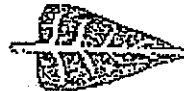
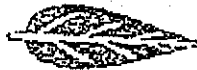
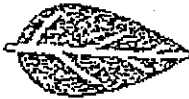
2 = Lanceolate

3 = Deltoid

4 = Cordate

5 = Rhomboid

☐



Apex of Leaflet:

1 = Acute

2 = Acuminate

3 = Cuspidate

4 = Obtuse

☐



Base of Leaflet:

1 = Obtuse

2 = Oblique

3 = Cordate

4 = Cuneate

5 = Attenuate

☐

**5. FLOWER COLOR AND DAYS TO BLOOM:**

☐

Color of Standard:

1 = White

2 = Cream

3 = Pink

4 = Blue

5 = Purple

☐

Color of Keel:

1 = White

2 = Cream

3 = Pink

4 = Blue

5 = Purple

☐

Color of Wings:

1 = White

2 = Cream

3 = Pink

4 = Blue

5 = Purple

☐

Days to 50% Bloom

**6. POD MORPHOLOGY:** (Green Pod Morphology Optional)

Green    Mature

☐

☐

Color Pattern:

1 = Solid

2 = Striped

3 = Blotched

4 = Mottled

5 = Other

☐

☐

Primary Color:

1 = Purple

2 = Red

3 = Green

4 = Yellow

5 = Tan

6 = Brown

7 = Other

☐

☐

Color Modifier:

1 = Light

2 = Light Medium

3 = Medium

4 = Medium Dark

5 = Dark

☐

☐

Secondary Color:

1 = Purple

2 = Red

3 = Green

4 = Yellow

5 = Tan

6 = Brown

7 = Other

☐

☐

Cross Section Shape:

1 = Flat

2 = Pear

3 = Round

4 = Figure Eight



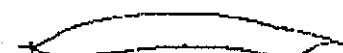
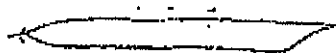
☐

☐

Pod Curvature

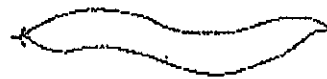
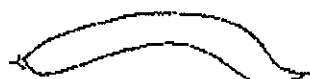
1 = Straight

2 = Slightly Curved



3 = Curved

4 = Recurved



☐

☐

Pod Beak Orientation:

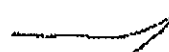
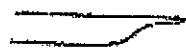
1 = Straight

2 = Curved Upward

3 = Curved Downward

4 = Variable

Average Beak Length, in cm. \_\_\_\_\_



☐

☐

Constrictions:

1 = None

2 = Slight

3 = Deep

☐






☐

Average Number of Seeds per Pod

## 7. SEED COLOR:

<input type="checkbox"/> 3	1 = Shiny	2 = Dull	3 = Semishiny	4 = Variable	<input type="checkbox"/> 1	1 = Monochrome	2 = Polychrome
<input type="checkbox"/> 07	Primary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple 9 = Blue 10 = Black 11 = Other				<input type="checkbox"/>	Secondary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple 9 = Blue 10 = Black 11 = Other	
<input type="checkbox"/> 1	Color Pattern: 1 = Solid 2 = Splashed 3 = Mottled 4 = Striped 5 = Flecked 6 = Dotted				<input type="checkbox"/> 1	Hilar Ring: 1 = Absent 2 = Present	
<input type="checkbox"/>	Hilar Ring Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple 9 = Blue 10 = Black 11 = Other						

## 8. SEED SHAPE AND WEIGHT:

<input type="checkbox"/> 4	Shape of Seed Taken From Middle of Pod:	1 = Round	2 = Oval	3 = Cuboid	4 = Kidney	5 = Truncate Fastigate
						
<input type="checkbox"/> 49	Dry Seed Weight in g/100g Seeds (Adjusted to 12% Moisture)					

## 9. ANTHOCYANIN PIGMENTATION:

1 = Absent 2 = Present	<input type="checkbox"/> 2 Flowers	<input type="checkbox"/> 1 Stems	<input type="checkbox"/> 1 Pods	<input type="checkbox"/> 2 Seeds
	<input type="checkbox"/> 1 Leaves	<input type="checkbox"/> 1 Petioles	<input type="checkbox"/> 1 Peduncles	<input type="checkbox"/> 1 Nodes

## 10. KNOWN DISEASE REACTION:

DISEASES – COMMON NAME: Anthracnose, Rust, Powdery Mildew, Fusarium Root Rot, Pythium Root Rot, Rhizoctonia Root Rot, Pythium Wilt, Sclerotinia White Mold, angular Leaf Spot, Bacterial Wilt, Halo Blight, Fuscos Blight, Common Bacterial Blight, Red Node Virus, Pod Mottle Virus, Bean Common Mosaic Virus, Bean Yellow Mosaic Virus, Curly Top Virus, Bacterial Brown Spot, Bean Southern Mosaic Virus, Other (Specify) \_\_\_\_\_

Reaction: 1 = Susceptible 2 = Resistant 3 = Tolerant 4 = Avoidance

(Give the Common Name (CN), Scientific Name (SN), and Race(s), Where Applicable)

<input type="checkbox"/> 2	Disease: CN <u>Bean Common Mosaic</u> ; SN _____ ; Race(s) <u>"I" gene resistance to all races</u>
<input type="checkbox"/> 2	Disease: CN <u>Aponomyces Root Rot</u> ; SN <u>Aphonomyces euteiches</u> ; Race(s) <u>none known</u>
<input type="checkbox"/>	Disease: CN _____ ; SN _____ ; Race(s) _____
<input type="checkbox"/>	Disease: CN _____ ; SN _____ ; Race(s) _____
<input type="checkbox"/>	Disease: CN _____ ; SN _____ ; Race(s) _____
<input type="checkbox"/>	Disease: CN _____ ; SN _____ ; Race(s) _____

## 11. KNOWN INSECT/NEMATODE RESISTANCE:

PESTS – COMMON NAME: Aphids, Bean Pod Weevil, Bruchid Beetle, Corn Earworm, Flea Beetle, Leaf Hopper, Lesion Nematode, Lygus, Mexican Bean Beetle, Root Knot Nematode, Corn Seed Maggot, Spider Mites, Thrips, Weevils, Western Bean Cutworm, Other (Specify) \_\_\_\_\_

Reaction: 1 = Susceptible 2 = Resistant 3 = Tolerant 4 = Avoidance

(Give the Common Name (CN), Scientific Name (SN), and Race(s), Where Applicable)

<input type="checkbox"/>	Pest: CN _____ ; SN _____ ; Race(s) _____
<input type="checkbox"/>	Pest: CN _____ ; SN _____ ; Race(s) _____
<input type="checkbox"/>	Pest: CN _____ ; SN _____ ; Race(s) _____

## 12. KNOWN PHYSIOLOGICAL STRESS REACTION:

1 = Susceptible 2 = Resistant 3 = Tolerant 4 = Avoidance

☐ Heat ☐ Cold ☐ Drought ☐ Air Pollution



200700159

#200700159

Exhibit C (Dry Edible Bean)

13. COMMENTS:

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE**EXHIBIT E**  
**STATEMENT OF THE BASIS OF OWNERSHIP**

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)  Seminis Vegetable Seeds, Inc.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  EX 08520700	3. VARIETY NAME  'RED ROVER' <sup>WAW</sup> 4122/08
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)  2700 Camino del Sol Oxnard, California 93030	5. TELEPHONE (Include area code)  (805) 647-1572	6. FAX (Include area code)  (805) 918-2545
7. PVPO NUMBER  <b>#200700159</b>		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain.



YES



NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country.



YES



NO

10. Is the applicant the original owner?



YES



NO

If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?



YES



NO

If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?



YES



NO

If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

The variety named in this application was developed by the Seminis Vegetable Seeds, Inc., employee (breeder) identified below. By agreement between the employee and Seminis Vegetable Seeds, Inc., all rights to any invention, discovery, or development made by an employee are assigned to the Company. No rights to such an invention, discovery, or development are retained by the employee.

Employee (Breeder): David Webster

Site Location: Filer, ID

**PLEASE NOTE:**

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

**U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705**

**EXHIBIT F  
DECLARATION REGARDING DEPOSIT**

NAME OF OWNER (S)  Seminis Vegetable Seeds, Inc.	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)  2700 Camino del Sol Oxnard, CA 93030	TEMPORARY OR EXPERIMENTAL DESIGNATION  EX 08520700
NAME OF OWNER REPRESENTATIVE (S)  Carol L. Miller	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)  <del>2700 Camino del Sol</del> 37437 State Highway 16 <del>Oxnard, CA 93030</del> Woodland, CA 95695	VARIETY NAME 'RED ROVER' <sup>AM</sup> 4/22/08 FOR OFFICIAL USE ONLY PVPO NUMBER <b>#200700159</b>

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Carol L. Miller  
Signature

22-Feb-07  
Date